



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Texas

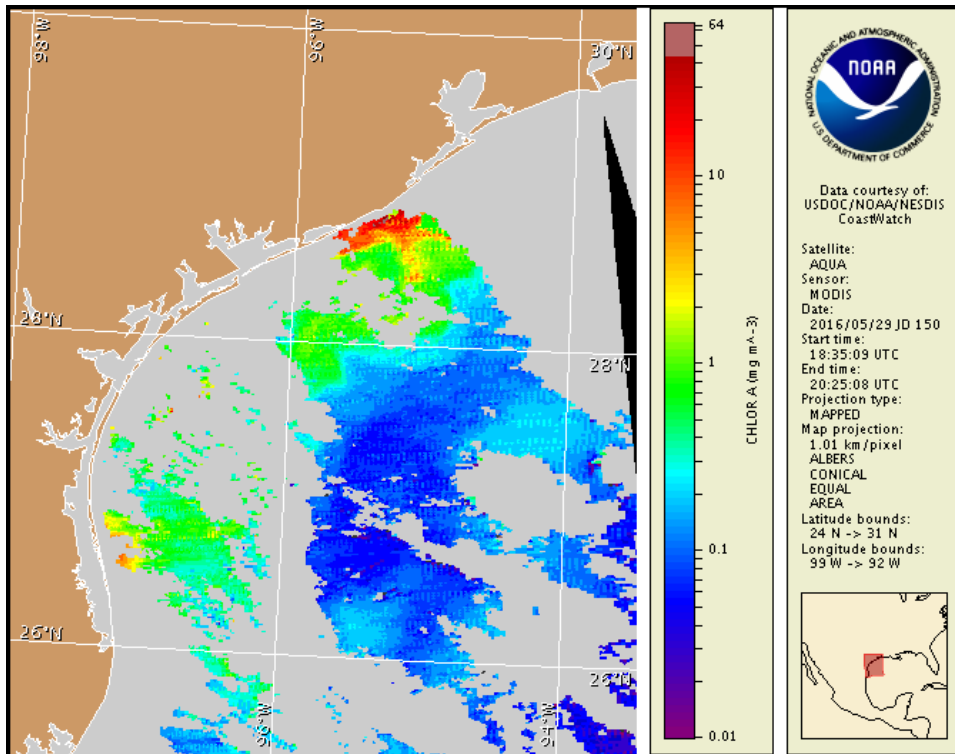
Tuesday, 31 May 2016

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, May 23, 2016



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from May 22 to 30: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). Cell count data are provided by Texas Parks and Wildlife Department. For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

http://tidesandcurrents.noaa.gov/hab/hab_publication/habfs_bulletin_guide.pdf

Detailed sample information can be obtained through the Texas Parks and Wildlife Department at:

<http://www.tpwd.state.tx.us/landwater/water/envconcerns/hab/redtide/status.phtml>

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit the NOAA Harmful Algal Bloom Operational Forecast System bulletin archive:

<http://tidesandcurrents.noaa.gov/hab/bulletins.html>

Conditions Report

Karenia brevis (commonly known as Texas red tide) ranges from not present to background concentrations along the coast of Texas. No respiratory irritation is expected Tuesday, May 31 through Monday, June 6.

Check http://tidesandcurrents.noaa.gov/hab/beach_conditions.html for recent, local observations.

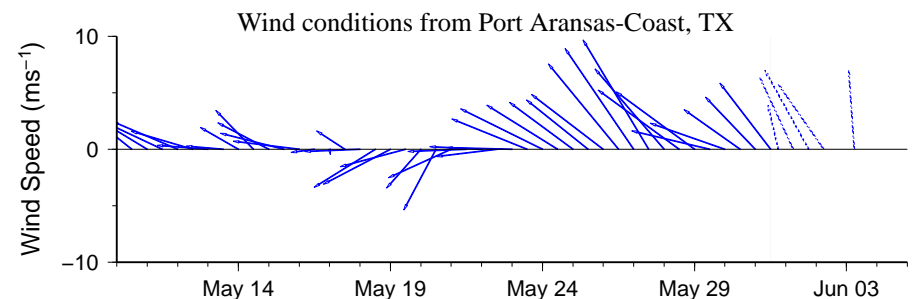
Analysis

Data from Texas A&M University's Imaging FlowCytobot, located on the Port Aransas ship channel, is currently unavailable. However, previous sampling indicates that *Karenia brevis* concentrations range from 'not present' to 'background' (TAMU; 5/3-13). For information on area shellfish restrictions, contact the Texas Department of State Health Services.

Recent MODIS Aqua imagery (5/29; shown left) has been partially obscured by clouds along- and offshore the Texas coast, limiting analysis. Patches of elevated to very high chlorophyll (2 to >20 $\mu\text{g/L}$) are visible along- and offshore the San Luis Pass to Sargent Beach region and offshore the South Padre Island region. Elevated chlorophyll is not indicative of the presence of *K. brevis* and is most likely an artifact of clouds in the imagery and the resuspension of benthic chlorophyll and sediments along the coast.

Forecast models based on predicted near-surface currents indicate negligible potential transport north from the Port Aransas region from May 31 to June 3.

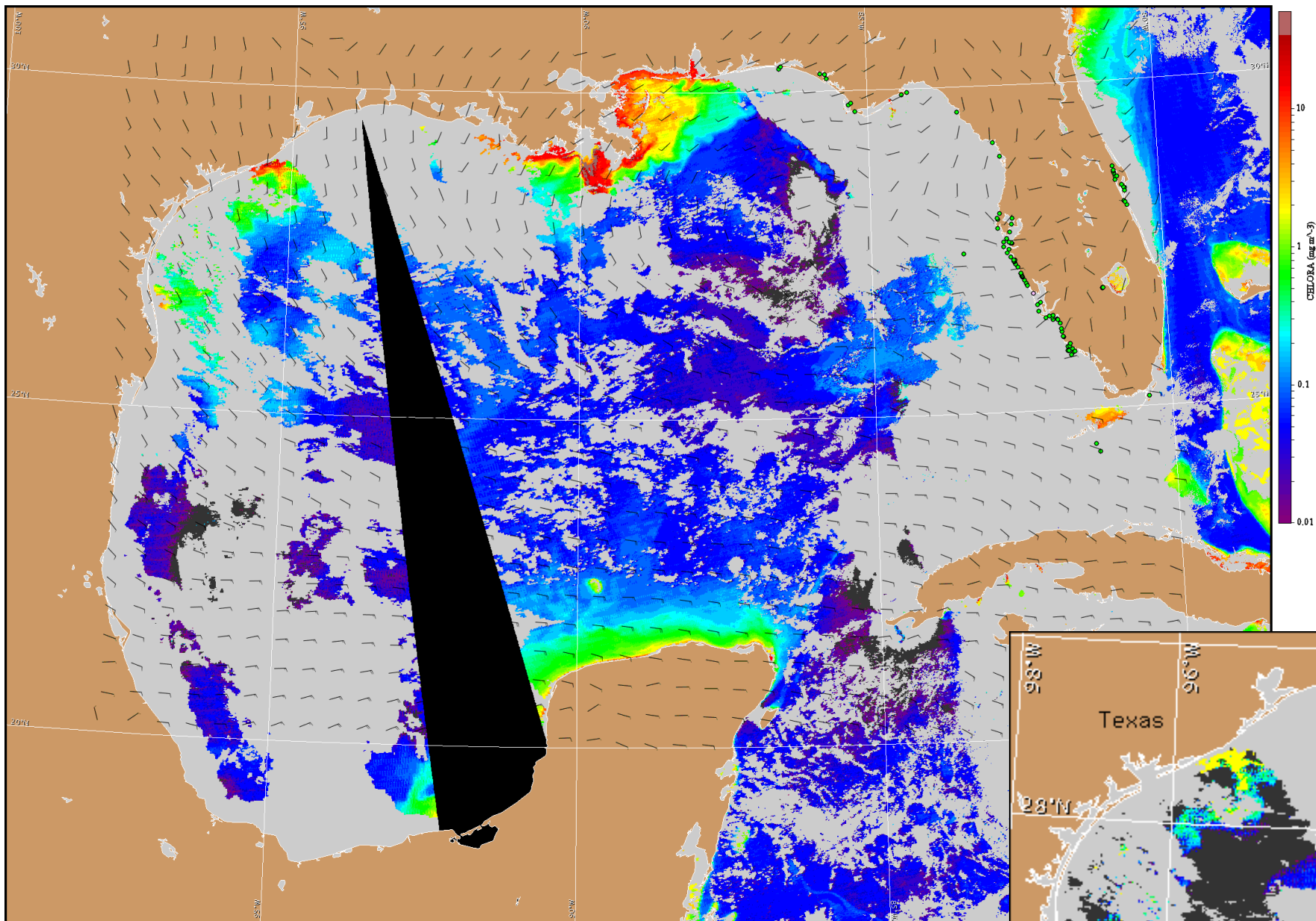
Kavanaugh, Lalime



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).

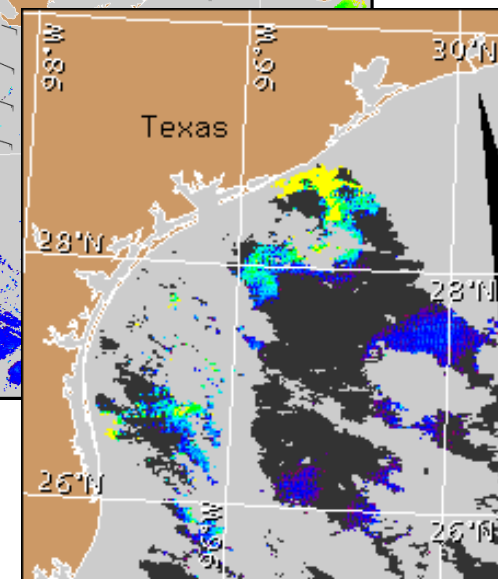
Wind Analysis

Port Aransas to Matagorda Ship Channel: Southeast winds (5-20kn, 3-10m/s) today through Friday. North to northeast winds (5kn, 3m/s) Saturday becoming east winds (5kn) Saturday night then shifting northeast after midnight.



Satellite chlorophyll image and forecast winds for June 1, 2016 06Z with points representing cell concentration sampling data from May 22 to 30: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). Cell count data are provided by Texas Parks and Wildlife Department. For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

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Verified and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).